

# FILE NOTATIONS

Entered in NID File

Entered On S R Sheet

Location Map Pinned

Card Indexed

IWR for State or Fee Land

Checked by Chief

Copy NID to Field Office

Approval Letter

Dispro

## COMPLETION DATA

Date Well Completed

11-27-39

Location Inspected

OW

WW

TA

Bond

GW

OS

PA

State of Fee Land

## LOGS FILED

Miller's Log

Electric Logs (Nbs)

E

IL

E-I

GR

GR-N

Micro

Lat

MI-L

Sonic

Others

(Complete File)

(Water Well)

DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Salt Lake City,

Serial Number **601294**

License or Permit **Permit**

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	<input checked="" type="checkbox"/>	SUBSEQUENT RECORD OF SHOOTING	
NOTICE OF INTENTION TO CHANGE PLAN		RECORD OF PERFORATING CASING	
NOTICE OF DATE FOR TEST OF WATER SHUT OFF		NOTICE OF INTENTION TO PULL OR OTHERWISE ALTER CASING	
REPORT ON RESULT OF TEST OF WATER SHUT OFF		NOTICE OF INTENTION TO ABANDON WELL	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO SHOOT		SUPPLEMENTARY WELL HISTORY	

INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA

July 31, 1935

Following is a ~~notice of intention to do work~~ on land under ~~permit~~ described as follows:

Utah (State or Territory) Grand (County or Subdivision) Cisco Unit Area (Field)  
Well No. **Ryde #1** ~~111~~ ~~112~~ ~~113~~ **22 S.** **22 E.** **S. 1. E.**  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)

The well is located **1100** ft. **100** of **N** line and **740** ft. **E** of **W** line of sec. **33**

The elevation of the derrick floor above sea level is \_\_\_\_\_ ft.

DETAILS OF PLAN OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings, indicate mudding jobs, cementing points, and all other important proposed work.)

Propose to drill a well at the above described location according to the following plan:

Spud **12 1/2**" hole and set approximately **80'** of **12 1/2**" conductor and cement same with **25** sacks.

Set **10"** casing through Wingate sandstone at approximately **1500** feet and make water shut off with formation seal or by cementing.

Drill and test **Paradox** formation expected between **2000** and **3000** feet, using whatever casing necessary to properly complete well.

(The above operation is initial test well under Cisco Unit Area approved by the Secretary of the Interior, July 11, 1935)

Approved

July 31, 1935

*E. W. Henderson*

Title

E. W. Henderson

District Engineer

306 Federal Bldg.,

Address

Salt Lake City, Utah

Company

Utah Southern Oil Co.

By

Title

Secretary

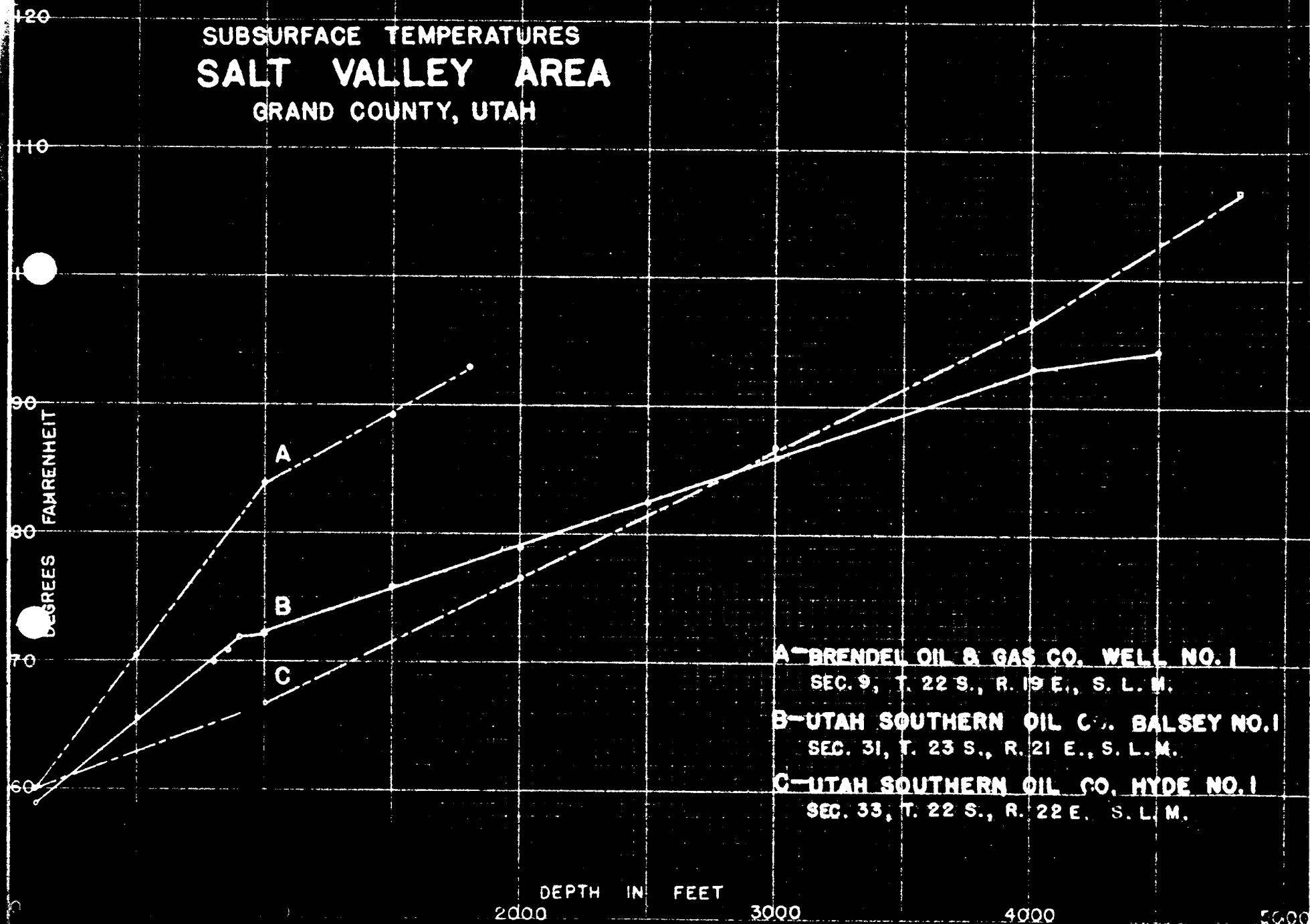
901 Clift Bldg.,

Address

Salt Lake City, Utah

NOTE: Reports on this form to be submitted in triplicate to the Supervisor for approval

**SUBSURFACE TEMPERATURES  
SALT VALLEY AREA  
GRAND COUNTY, UTAH**



**A-BRENDEL OIL & GAS CO. WELL NO. 1**

**SEC. 9, T. 22 S., R. 19 E., S. L. M.**

**B-UTAH SOUTHERN OIL CO. BALSEY NO. 1**

**SEC. 31, T. 23 S., R. 21 E., S. L. M.**

**C-UTAH SOUTHERN OIL CO. HYDE NO. 1**

**SEC. 33, T. 22 S., R. 22 E., S. L. M.**

- Copy June 4.3.92 -

DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
CONSERVATION BRANCH

INDIVIDUAL WELL RECORD

22 B.

22 E.

S. L. Mer.

PUBLIC LAND

Ref. No. 1

Land office **Salt Lake City** State **Utah**

Serial number **061394** County **Grand**

Permitted by **Orson John Hyde** Field **Cisco Unit Area**

Operator **Utah Southern Oil Co.** District **Utah**

Well number **1** Subdivision **Sec 3 NW 1/4 NW 1/4 Sec. 36**

Location **1100** feet from N ~~line~~ line and **740** feet from ~~line~~ W line of **Section 36 1/4** Sec.

Drilling approved **July 21** 19**35** Well elevation **4785** feet

Drilling commenced **October 1,** 19**35** Total depth **6715** feet

Drilling ceased **April (?)** 19**37** Initial prod. **None.**

Completed for prod. **Dry hole** 19**39** Gravity A.P.I. **None.**

Abandonment completed - **Oct. 25, 1939**

Abandonment approved **November 27** 19**39** Initial R.P. **None.**

Geologic formations Productive horizons

Surface Lowest tested Name Depths Contents

**McKinn** **Hermosa** **None**

Well Status

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>1935</b>							<b>Loc.</b>					
<b>1936</b>	DRG	DRG	DRG	DST	DST	DST	DST	DST	DRG	DRG	DRG	DRG
<b>1937</b>	DST		DRG	DST	DST							
<b>1939</b>									DST	Abd	P&A	
Water from this well will be used as a public water supply for stock watering purposes, under Division of Grazing.												

Remarks **Initial test well to be drilled under Cisco Unit Area approved by**

**Secretary of the Interior July 11, 1935.**

33-22S-22E S NW NW, Utah Southern Oil Co., Hyde #1 (S.L. 051394)

Ref. No. 1.

STATUS: DRG. 5154', limey shales (Visited 9-15-1936)

REMARKS: Crew working daylight tour and making slow progress due to type of equipment and hard formation being drilled. A recheck of temperature observations made at this well verifies former observations and gives further proof that a change in the gradient of the temperature curve occurs at what is presumably contact of Pennsylvanian and Permian formations.

33-22S-22E S NW NW, Utah Southern Oil Co., Hyde #1 (S. L. 051394)

Ref. No. 1.

STATUS: DRG. 5550', limey shale (Visited 10-23-1936)

REMARKS: The approximately 1500' of red sandy shales and limestones drilled in this well and tentatively correlated as of Pennsylvanian age represents about the maximum thickness of the Pennsylvanian beds in this locality and some change in formation is expected within the <sup>next</sup> 100 to 200 feet of drilling. Hole below 1108 feet is uncased.

33-22S-22E S NW NW, Utah Southern Oil Co., Hyde #1 (S. L. G. 051394)

Ref. No. 1.

STATUS: DRG. 5800', lime and brown shale. (Co. 12-3-1936)

REMARKS: No change in formation to indicate base of Pennsylvanian, has been reached. Temperature gradient below 4100' remains same.

33-22S-22E S NW NW, Utah Southern Oil Co., Hyde #1 (S.L. 051394), Ref. No. 1

STATUS: DRG. 6100', limey shale. (Dougan 12-29-36) 12-29-36

REMARKS: No change in formation. Crew working daylight tour. Open hole below 1108 feet.

33-22S-22E. S NW NW, Utah Southern Oil Co., Hyde No. 1 (S. L. C. 051394)

Ref. No. 1

STATUS: DST. 4880', sand (Visited 7-14-1936)

REMARKS: Seismographic survey was completed during the latter but data obtained has not been fully interpreted. The subsurface temperature observations referred to in last months report could not be completed due to mud on walls and casing interfering with lowering of thermometers.

33-22S-22E S NW NW, Utah Southern Oil Co., Hyde #1 (S.L. 051394)

Ref. No. 1

STATUS: DST. 4880', sand (J. L. Dougan 9-2-36)

REMARKS: Results obtained by means of a seismographic survey of the area surrounding the location of this well indicate the advisability of continuing the test to a depth of at least 6000'. Officials of the company believe that the shore-line condition expected at 2500' will be encountered around 5000' and if a sandstone is present that chances of commercial production are favorable. The tug-wheel on the bull-wheel shaft has been cut down to permit diesel engine being used to pull the extra weight of line and tools from the hole without overloading. Subsurface temperature observations and the seismographic survey indicate a change in formation at approximately 4000'. It is believed that the contact between beds of Permian and Pennsylvanian age is at approximately 4000' and that lithologic differences between beds of the two ages was not sufficient to differentiate them in the drill cuttings. Drilling operations will be resumed about the first of September.

33-223-22E. S NW NW, Utah Southern Oil Co., Hyde No. 1 (S. L. C.

051394) Ref. No. 1

STATUS: DST. 4890', sand (Visited 5-9-1936)

REMARKS: Total depth reported incorrectly last month as 4890'. Subsurface temperature observations to obtain data for comparison with similar observations taken in other wells in the general area were made on May 7-8-9 with the following results:

<u>Depth</u>	<u>Temp. observed</u>
100 ft.	60° F.
1000 "	66.6° F.
2000 "	76.1 "
3000 "	86.8 "
4000 "	96.5 "
4800 "	106.9 "

Operations at well remain suspended while company is perfecting plans for further seismographic work in the area.

33-223-22E. S NW NW, Utah Southern Oil Co., Hyde No. 1 (S. L. C. 051394)

Ref. No. 1

STATUS: DST. 4890', sand (Visited 6-11-1936)

REMARKS: The seismographic survey of the Cisco Unit Area has been delayed due to crew not completing work in another area as expected. Crew now reports the work will be started about the first of July. C. E. Van Oostland of the Washington office has requested and obtained permission of the company to make a subsurface temperature *survey* of the hole. Results will be given in July report.

33-22S-22E. S NW NW , Utah Southern Oil Co., Hyde No. 1 (S. L. 051394)

Ref. No. 1. *March 1936*

STATUS: DRG. 4140', shaley sand (Visited 3-31-36) ✓

REMARKS: Approximately 1500' of soft buff to reddish sandstone containing coarse particles of quartz loosely held together with red shale drilled at this location has been correlated as Rico and Cutler of Permian age. The total thickness of the Permian formation drilled in this well exceeds that at any known outcrop in the general region. Drilling will continue to determine presence of Hermosa and Paradox formation below the Permian beds and to determine depth of granite indicated by geophysical survey to be approximately 4800 at this location.

33-22S-22E. S.NW NW, Utah Southern Oil Co., Hyde No. 1 (S. L. 051394)

Ref. No. 1.

STATUS: DST. 4850', sand. (Visited 4-23-1936) ✓

REMARKS: This well has drilled approximately 2400' of buff to red sandstone and conglomerate which has been correlated as of Permian age. The 2400' of Permian formation exceeds the thickness of the formation at outcrops and in other wells drilled in the area and since the contact between beds of Permian and Pennsylvanian age is not always clearly defined it seems probable that the lower part of the hole is in beds of the latter age. Operations have been temporarily suspended while a resurvey of the area with geophysical instruments is being made.

33-223-22E. Ref. No. 1, Utah Southern Oil Co., Hyde #1 (S. L. G.  
051394) S NW NW *Jan 1936*

STATUS: DEG. 1900', shale (Fischer 2-1-36)

REMARKS: Operator has had a number of fishing jobs during the  
month due to breaking of bits and drilling stems. A new

33-223-22E. Ref. No. 1, Utah Southern Oil Co., Hyde #1 (S. L. G. 051-  
394) S N W N W *Jan 1936*

STATUS: DEG. 2710', sandy shale (Visited 2-23-36)

REMARKS: This well has drilled approximately 1600' of beds of  
Permian and Triassic age, hole bottoms in Cutler or Rice, which in-  
dicates the normal sequence and thickness of beds in the area to be  
present at this location. Geophysical surveys made to determine  
location of the test indicated a feathering out of the Permian  
and Triassic formations at the point selected and that beds of  
Pennsylvanian age might be encountered at approximately 2800'.  
The fact that the Pennsylvanian beds have not been reached in-  
dicates a possibility that they may not be present in this loca-  
tion and that granite may be encountered immediately underly-  
ing the Permian beds. If such is the case, the location was  
made to near the shore line and a second test located to the  
north of the present will be necessary to prove or disprove the  
theory of shore-line accumulation.

33-22S-22E. Ref. No. 1, Utah Southern Oil Co. Hyde #1 (S. L. C. 051394)

S NW NW

*Oct 1935*

STATUS: DRG. 600', shale (Visited 10-21-35)

REMARKS: The water well was completed at 319' where 75 barrels/<sup>a day</sup> of excellent water was developed in the Entrada sandstone. The water well was cased to bottom with 5-3/16" casing and will be pumped from the beam while drilling. Permission to land the 12 1/2" conductor at 80' without cementing and to cement the 10" casing at about 1500' in lieu thereof has been granted since it did not seem advisable to cement the short conductor string with the water well drilled to a greater depth and only one or two feet distant. Commenced drilling October 1, 1935.

33-22S-22E. Ref. No. 1, Utah Southern Oil Co. Hyde #1 (S. L. C.

051394) S NW NW

*Nov 1935*

STATUS: DRG. 1170', shale (Dugan 11-30-35)

REMARKS: The top of the Chinle formation was found at 1100', some 300' high than was expected, and a string of 10" casing cemented at 1109' with 20 sacks to shut off water from upper formations. The first attempt was not successful, probably due to cement channeling, and a recement job using 20 sacks was necessary to obtain shut off.

33-22S-22E. Ref. No. 1, Utah Southern Oil Co., Hyde #1 (S. L. C.

051394) S NW NW.

*Nov 1935*

STATUS: DRG. 1694', shale (Visited 12-17-35)

REMARKS: Hard limestone shells in the Moenkopi formation have caused a number of complicated fishing jobs during the month. Small seepages of water were found at three points in the Moenkopi and will require the running of a string of casing before drilling into the Paradox formation.

33-22S-22E. Ref. No. 1, Utah Southern Oil Co. Hyde #1 (S. L. C.

051394) S NW NW

*Sept. 1935*

STATUS: LOC. (Visited 9-11-35)

REMARKS: No water supply for camp and drilling use is available in the vicinity of this well and since a number of sands near the base of the Morrison formation are known to be present at shallow depths in the area, the company decided to develop its own water supply. by spudding a water well under the derrick floor prior to commencing actual drilling operations. The water well has been drilled to approximately 300 feet without developing sufficient water to meet requirements and will be drilled deeper until sufficient water has been developed or a depth that will make use of any water developed impractical. Drilling of the test well will be delayed pending development of a water supply.

33-22S-22E. Ref. No. 1, Utah Southern Oil Co. Hyde #1 (S. L. C.  
051394) <sup>S</sup> NW NW.

STATUS: LOC.

REMARKS: Notice of intention to drill approved July 31,

1935. Operator now moving in equipment and constructing roads to location. This well is the initial test to be drilled under a unit plan of operation including 25 oil and gas prospecting permits, approximately 60,000 acres, and is being drilled in compliance with requirements of the unit plan. The location was made after a survey of the area by a seismograph, later checked by a second seismograph survey working independently of the first, to determine approximate location where beds of Pennsylvanian age feather out against an old granitic mass forming the edge of the basing. The seismographic survey indicates beds of the Hermosa and Paradox formation should be drilled at depths between 2000 and 3000 feet. The location is on the flank of Yellow Cat Dome and thus <sup>has</sup> two chances of trapping—shore line conditions and folding.

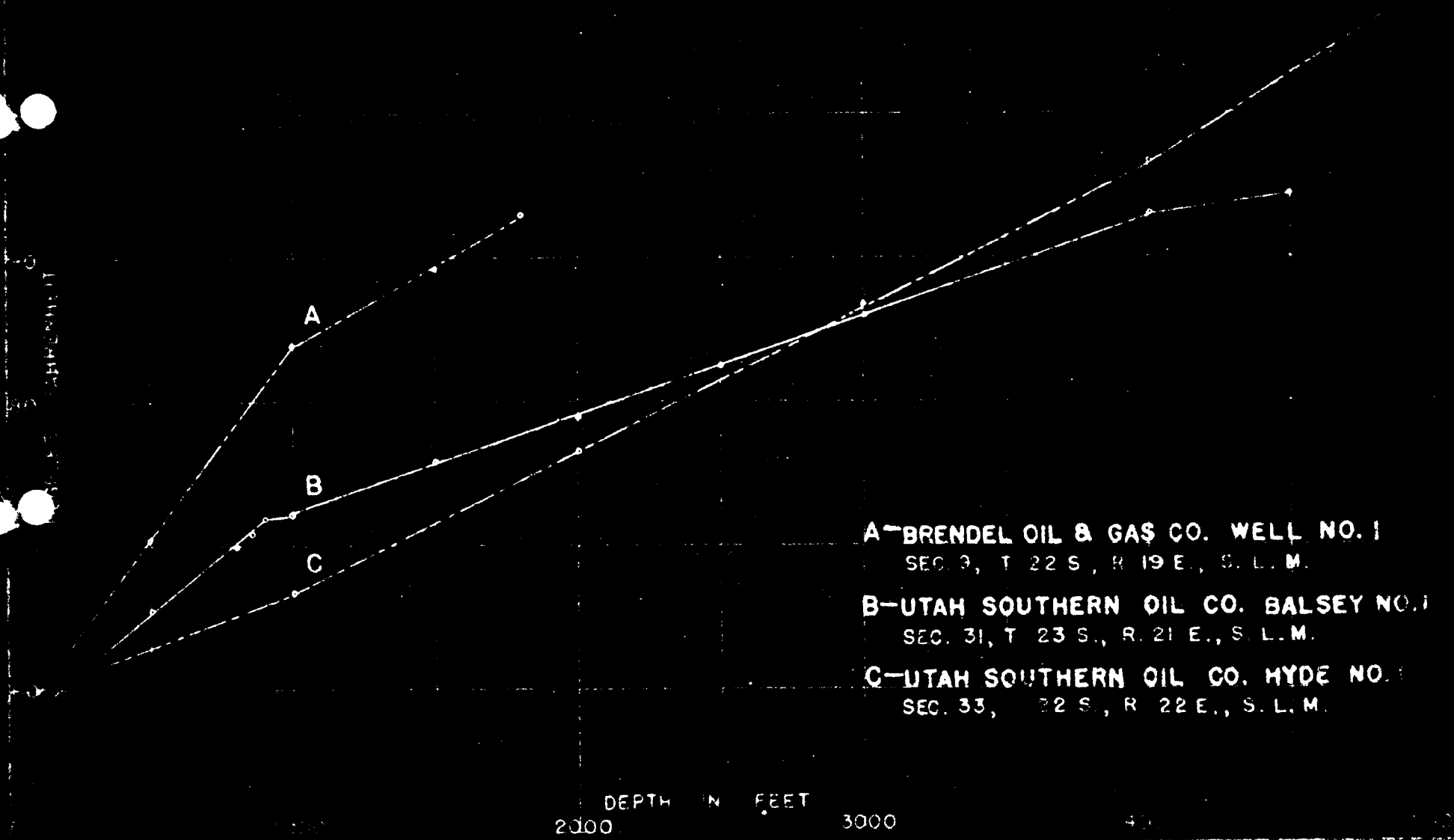
33-22S-22E. Ref. No. 1, Utah Southern Oil Co., Hyde #1 (S. L. C.  
051394) S NW NW 11/4. 1935

STATUS: LOC.

REMARKS: Company has spent the month building road to location, moving in equipment, and rigging up. It is expected drilling operations will begin September 1st. A diesel engine will be used to furnish power.

# SUBSURFACE TEMPERATURES SALT VALLEY AREA GRAND COUNTY, UTAH

TEMPERATURE IN DEGREES FAHRENHEIT



A-BRENDEL OIL & GAS CO. WELL NO. 1  
SEC. 9, T. 22 S., R. 19 E., S. L. M.

B-UTAH SOUTHERN OIL CO. BALSEY NO. 1  
SEC. 31, T. 23 S., R. 21 E., S. L. M.

C-UTAH SOUTHERN OIL CO. HYDE NO. 1  
SEC. 33, T. 22 S., R. 22 E., S. L. M.

DEPTH IN FEET

2000

3000

4000

RM 212 47

break the 10 inch casing as the fluid level in the hole did not raise. The maximum water head in the hole after shooting the 8 1/4 inch between 1100 and 1400 feet, was 300 feet from the surface. (The hole was perfectly dry prior to shooting the 8 1/4 inch casing close to water horizons at these points). Ripped the 10 inch casing between 325 and 335 feet and between 300 feet and 310 feet. The water raised immediately to 225 feet from the surface, this water coming from the fresh water horizon encountered in the hole at 300 feet. Cleaned out the cellar and plugged off around the 10 inch at the bottom of the cellar and filled the cellar with dirt after screwing 10 inch pup joint on the 10 inch casing which stands now about 5 feet above the surface of the ground. Moved the rig and all material away from the well site and cleaned up the surface in good shape.

DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

U. S. Land Office  
Salt Lake City, Utah.  
Serial Number **51394**  
Lease or Permit **Permit.**

**SUNDRY NOTICES AND REPORTS ON WELLS**

NOTICE OF INTENTION TO DRILL		SUBSEQUENT RECORD OF SHOOTING	
NOTICE OF INTENTION TO CHANGE PLANS	<b>XXX</b>	RECORD OF PERFORATING CASING	
NOTICE OF DATE FOR TEST OF WATER SHUT-OFF		NOTICE OF INTENTION TO PULL OR OTHERWISE ALTER CASING	
REPORT ON RESULT OF TEST OF WATER SHUT-OFF		NOTICE OF INTENTION TO ABANDON WELL	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO SHOOT		SUPPLEMENTARY WELL HISTORY	

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

**November 15, 1935,** 19

Following is a notice of intention to do work on land under permit described as follows:  
~~report of work done~~

Utah Grand County Cisco Unit area  
(State or Territory) (County or Subdivision) (Field)  
Well No. Hydra No. 1 17 1/2 N 1 Sec. 33 T. 22 S. R. 22 E. SLC.  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)

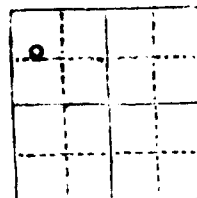
The well is located 1100 ft. S of W line and 740 ft. E of W line of sec. 33

The elevation of the derrick floor above sea level is 4725 ft.

**DETAILS OF PLAN OF WORK**

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work.)

Since we drilled a water well 319 feet deep in the corner of the collar about three feet from the main hole, it would appear useless to cement 12 1/2 inch conductor pipe at 80 feet as outlined in our original drilling program, for it would be useless as an anchor string with the other hole so close by. We propose to not cement the 12 1/2 inch but to cement the ten inch at 1109 feet, the present depth of the hole, through the intricate sandstone, using from fifteen to twenty sacks of cement, dumped with Baker cement dump bailer and displace back of ten inch casing by adding additional water column before setting pipe on bottom.



Approved (SEE ATTACHED) Nov. 29, 1935

Company Utah Southern Oil Company

E. W. Henderson  
Title District Engineer  
GEOLOGICAL SURVEY

By [Signature]  
Title Secretary

Address 306 Federal Bldg., Salt Lake City, Utah.

Address 201 Clift Bldg. Salt Lake City.

NOTE.—Reports on this form to be submitted in triplicate to the Supervisor for approval.

DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSerial Number 051394Lease or Permit Permit.

## SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT RECORD OF SHOOTING	
NOTICE OF INTENTION TO CHANGE PLANS		RECORD OF PERFORATING CASING	
NOTICE OF DATE FOR TEST OF WATER SHUT-OFF		NOTICE OF INTENTION TO PULL OR OTHERWISE ALTER CASING	
REPORT ON RESULT OF TEST OF WATER SHUT-OFF	<input checked="" type="checkbox"/>	NOTICE OF INTENTION TO ABANDON WELL	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO SHOOT		SUPPLEMENTARY WELL HISTORY	

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

December 1, 1935. 192

Following is a notice of intention to do work on land under permit described as follows:  
report of work done case

Utah

(State or Territory)

Grand County

(County or Subdivision)

Cisco Unit Area

(Field)

Well No. Hyde No. 1, NW 1/4 Sec. 33, T. 22 S., R. 22 E., S. E. C.  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)The well is located 1100 ft. N of N line and 740 ft. E of W. line of sec. 33,  
S W XThe elevation of the derrick floor above sea level is 4785 ft.

## DETAILS OF PLAN OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work.)

Nov. 16, 1935. Cemented 10" - 45# - 10' 10" casing with regular shoe at 1107' 11" with 15 sacks cement, dumped with Baker cement dump bailer on bottom with casing raised 5 ft. off bottom. Displaced with 2 barrels of water before setting casing on bottom.

Nov. 20, 1935. Drilled out cement on afternoon tour. Had 20' cement in the pipe which seemed to be set o.k. but did not get water shut-off. Casing froze but by increasing waterhead inside of ten inch casing 100', got 35' displacement in 15 minutes. Apparently there was a leak or channel in the cement around shoe.

Nov. 22, 1935. Re-cemented with 21 sacks, dumped on bottom with Baker cement dump bailer and displaced with 100' of water added to column inside 10" casing.

Nov. 25, 1935. Bailed water down 750 feet for casing test before drilling out cement. Let stand over night - no leaks.

Nov. 26, 1935. Drilled out cement. Hole bailed down and tested dry.

Approved December 21, 1935.Company UTAH SOUTHERN OIL COMPANY,E. W. Henderson  
District Engineer  
GEOLOGICAL SURVEYBy [Signature]  
Title Superintendent.Address 306 Federal Bldg.,  
Salt Lake City, Utah.Address 801 Cliff Bldg. Salt Lake City.

NOTE.—Reports on this form to be submitted in triplicate to the Supervisor for approval.

GOVERNMENT PRINTING OFFICE 6-7085

506 Federal Building  
Salt Lake City, Utah  
Nov. 16, 1936

Mr. John Wilson  
210 Highland Savings Bldg.  
Denver, Colorado

Permit Salt Lake City 051394  
Cisno Unit, Grand County, Utah

Dear Mr. Wilson:

The following data with reference to sub-surface temperature observations made at wells in the Salt Valley area, Grand County, Utah, are furnished you at the suggestion of Mr. H. J. Duncan and with the consent of Mr. J. L. Dougan as to wells of the Utah Southern Oil Company:

	(A)	(B)	(C)
DEPTH	<u>°F.</u>	<u>°F.</u>	<u>°F.</u>
100'	60.0	58.8	60.0
250	-	60.5	-
500	-	65.3	70.2
800	-	69.9	-
900	-	70.8	-
1000	-	71.9	-
1500	60.3	72.0	83.9
1800	-	75.7	89.0
2000	76.1	-	93.0
2500	-	78.3	-
3000	86.8	82.3	-
3500	91.9	85.9	-
3800	94.8	86.4	-
4000	96.9	-	-
4250	99.6	93.0	-
4500	102.9	-	-
4800	106.9	94.2	-
5000	109.0	-	-
5250	112.0	-	-
5500	115.0	-	-
5750	118.0	-	-

\* (A) Utah Southern Oil Co., Hyde No. 1, Sec. 23, T. 22 S., R. 22 E.  
 \* (B) Utah Southern Oil Co., Balsey No. 1, Sec. 31, T. 23 S., R. 21 E.  
 \* Observations made by E. W. Henderson and A. P. Vothala  
 \*\* (C) Brendal Oil & Gas Co., Well No. 1, Sec. 9, T. 22 S., R. 19 E.  
 \*\* Observations made by E. W. Henderson

I am enclosing a tracing showing plotting of data transmitted herewith since it will not be possible to obtain prints without a delay of at least two or three days. Please return the tracing after you have obtained necessary prints.

Very truly yours,

E. W. Henderson,  
District Engineer.

cc Jasper  
Utah Southern Oil Co.  
Files (2)

DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Number 051394

Lease or Permit Permit

SUNDRY NOTICES AND REPORTS ON WELLS

1939

NOTICE OF INTENTION TO DRILL	SUBSEQUENT RECORD OF SHOOTING
NOTICE OF INTENTION TO CHANGE PLANS	RECORD OF PERFORATING CASING
NOTICE OF DATE FOR TEST OF WATER SHUT-OFF	NOTICE OF INTENTION TO PULL OR OTHERWISE ALTER CASING
REPORT ON RESULT OF TEST OF WATER SHUT-OFF	NOTICE OF INTENTION TO ABANDON WELL
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL	SUBSEQUENT REPORT OF ABANDONMENT
NOTICE OF INTENTION TO SHOOT	SUPPLEMENTARY WELL HISTORY

(INDICATE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

September 14, 1939, 19

Following is a notice of intention to do work on land under permit described as follows:

Utah

Grand County,

Cisco Unit Area,

(State or Territory)

(County or Subdivision)

(Field)

Well No. 1

Section 33,

T. 22 South,

R. 22 East,

S.L.C.

(1/4 Sec. and Sec. No.)

(Twp.)

(Range)

(Meridian)

The well is located 1100 ft. N of North line and 640 ft. E of West line of sec. 33.

The elevation of the derrick floor above sea level is 4785 ft.

DETAILS OF PLAN OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work.)

We propose to fill hole with mud from bottom back to approximately 1940 feet, or near the bottom of the 8 1/4 inch casing which is cemented. Then put in a cement plug at this point and fill the hole with mud back to 1400 or 1500 feet, this being the probable point where the 8 1/4 inch casing can be parted and pulled. It is very unlikely the 8 1/4 inch casing can be pulled if parted below this point due to the cement back of the pipe. After pulling the 8 1/4 inch casing we will fill the hole with mud back over the water horizons between 1300 and 1160 feet and up to approximately the shoe of the 10 inch casing at 1109 feet and put in a cement plug on top of the mud. Then fill the hole with mud to 400 feet, inside of the 10 inch casing and probably put a small cement plug on the top of the mud inside the casing at this point. Then rip the 10 inch casing between 300 and 340 feet to let into the hole the fresh water which was encountered at this depth, and leave as a water well. Under this procedure none of the 10 inch casing would be pulled but would be left in the hole to leave the well so it can be used as a water well.

Approved (SEE RIDER ATTACHED) Oct. 5, 1939 Company UTAH SOUTHERN OIL COMPANY.

E. W. Henderson  
District Engineer  
306 Federal Building  
Salt Lake City, Utah

By \_\_\_\_\_  
Title \_\_\_\_\_ President.

Address 901 Utah Oil Bldg. Salt Lake City.

NOTE—Reports on this form to be submitted in triplicate to the Supervisor for approval.

APPROVAL GIVEN AS FOLLOWS:

1. Please notify M. W. Henderson, of the U. S. Geological Survey, stationed at Salt Lake City, Utah, actual date of the commencement of plugging and abandonment operations, that a representative of the Survey may be present.
2. A permanent marker, consisting of not less than 10' of iron pipe, not less than 4" in diameter, and extending four feet above the surface to be cemented in the ground at the location of this well.
3. A supplementary report of final abandonment (in triplicate on form 9-351) to be submitted to this office when the work is finished. This report to give a detailed account of the manner in which the work was actually carried out, including the nature and quantities of materials used in plugging and the location and extent (by depths) of the plugs of various materials. Records of amounts, size and locations (by depths) of all casing left in the well, and the names and positions of employees who carried on the work should be included.

33-228-22E

S NW NW, Utah Southern Oil Co., Hyde #1 (S.L.C. 051394)

Ref. No. 1. *Jun. 1937*

STATUS: DST. 6338', shaley limestone (Co. report 1/25/37)

REMARKS: ~~Operations temporarily~~ Suspended due to weather conditions and to make some change in equipment. Operator proposes to continue test until definite information is obtained as to presence and character of Paradox formation in the area or <sup>as</sup> so long as satisfactory progress can be made.

33-228-22E

S NW NW, Utah Southern Oil Co., Hyde #1 (S.L.C. 051394)

Ref. No. 1.

*Feb. 1937*

STATUS: DRG. 6336'. Shaley limestone. (Co. report 3/2/37)

REMARKS: Operations resumed 3/1/37. Top of Paradox formation expected within next 300 to 400 ft.

33-228-22E

S NW NW, Utah Southern Oil Co., Hyde #1 (S.L.C. 051394)

Ref. No. 1.

STATUS: DRG. 6715'. Shaley limestone. (Co. report 3/2/37)

REMARKS: No change in formation.

33-228-22E

S NW NW, Utah Southern Oil Co., Hyde #1 (S.L.C. 051394)

Ref. No. 1.

*April 1937*

STATUS: DST. 6715'. Shaley limestone. (Co. report 5/2/37)

REMARKS: Operations suspended pending decision to abandon or drill deeper.

33-228-22E

S NW NW, Utah Southern Oil Co., Hyde #1 (S.L.C. 051394)

Ref. No. 1.

*May 1937*

STATUS: DST. 6715'. Shaley limestone. (Co. report 6/2/37)

REMARKS: Operations suspended pending decision to abandon or drill deeper. Will be omitted from future reports until operations are resumed.

U. S. LAND OFFICE Salt Lake City

SERIAL NUMBER 051394

LEASE OR PERMIT TO PROSPECT

## DEPARTMENT OF THE INTERIOR

## GEOLOGICAL SURVEY

## LOG OF OIL OR GAS WELL

## LOCATE WELL CORRECTLY

Company UTAH SOUTHERN OIL COMPANY, Address 901 Utah Bldg., Salt Lake City.  
 Lessor or Tract \_\_\_\_\_ Field Bliss Unit Area State Utah.  
 Well No. Hyde 1 Sec. 33 T. 22S R. 22E. Meridian S.T.C. County Grand  
 Location 1100 ft. N. of North Line and 640 ft. E. of West Line of Section 33. Elevation 4785 Ft.  
 (Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed UTAH SOUTHERN OIL COMPANY,Date September 14, 1939.

The summary on this page is for the condition of the well at above date.

President.

Commenced drilling October 1, 1935, 19\_\_\_\_ Finished drilling \_\_\_\_\_, 19\_\_\_\_

## OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from \_\_\_\_\_ to \_\_\_\_\_ No. 4, from \_\_\_\_\_ to \_\_\_\_\_  
 No. 2, from \_\_\_\_\_ to \_\_\_\_\_ No. 5, from \_\_\_\_\_ to \_\_\_\_\_  
 No. 3, from \_\_\_\_\_ to \_\_\_\_\_ No. 6, from \_\_\_\_\_ to \_\_\_\_\_

## IMPORTANT WATER SANDS

No. 1, from 300 Ft. to 380 Ft. No. 3, from 1215 Ft. to 1245 Ft.  
 No. 2, from 1160 Ft. to 1185 Ft. No. 4, from 1275 Ft. to 1295 Ft.

## CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From	To	
10"	45	10 Thd. D.B.A.	1109	Plain					
8 1/2"	32	10 Thd. D.B.A.	1940	Plain					

## MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10"	1109	36 Sacks	Displacement		
8 1/2"	1940	54 Sacks	Displacement		

## PLUGS AND ADAPTERS

Heaving plug—Material \_\_\_\_\_ Length \_\_\_\_\_ Depth set \_\_\_\_\_  
 Adapter—Material \_\_\_\_\_ Size \_\_\_\_\_

## SHOOTING RECORD

FOLD MARK

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10"	1109	36 sacks	Displacement		
8 1/2"	1940	54 sacks	Displacement		

PLUGS AND ADAPTERS

Heavy plug	Material	Length	Depth set
Adapter	Material	Size	

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet  
 Cable tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet

DATES

\_\_\_\_\_, 19\_\_\_\_ Put to producing \_\_\_\_\_, 19\_\_\_\_  
 The production for the first 24 hours was \_\_\_\_\_ barrels of fluid of which \_\_\_\_\_ % was oil; \_\_\_\_\_ % emulsion; \_\_\_\_\_ % water; and \_\_\_\_\_ % sediment. Gravity, °Bé. \_\_\_\_\_  
 If gas well, cu. ft. per 24 hours \_\_\_\_\_ Gallons gasoline per 1,000 cu. ft. of gas \_\_\_\_\_  
 Rock pressure, lbs. per sq. in. \_\_\_\_\_

EMPLOYEES

Lee Thompson \_\_\_\_\_, Driller \_\_\_\_\_, Driller  
 A. P. Voorhies \_\_\_\_\_, Driller \_\_\_\_\_, Driller

FORMATION RECORD

FROM	TO	TOTAL FEET	FORMATION
0	15		Variegated shale.
15	17		Hard shell.
17	78		Variegated shale with shells. Reduced hole at 63 feet to 12 1/2 inch.
78	106		Variegated shale with shells.
106	137		Limey shaly sand with lime shells. Set 15" drilling nipple - 7Ft. length in cellar.
137	141		Lime - sandy shale.
141	146		Pink sandy shale.
146	150		Lime shell. Shell very hard, battered the bits badly.
150	154		Hard sandy lime.
154	174		Sandy shale with hard lime shells.
174	196		Sandy lime.
196	201		Gray lime
201	219		Gray shale with lime shells.
219	223		Hard lime shell. Brown.
223	229		Shale. Brown.
229	237		Hard lime shell. Brown.
237	243		Red sandy shale.
243	256		Red shale with lime shells.
256	277		Red shale.

LOGGING RECORD



## FORMATION RECORD—Continued

FROM	TO	TOTAL FEET	FORMATION
277	288		Red shale. Caving some.
288	290		Light shale.
290	300		Sandy shale.
300	339		Water sand. 60 Ft. of water in hole. (Top of Entrada).
339	380		Sand.
380	405		White sand with talc.
405	416		White sand - hard.
416	431		Brown sand - hard.
431	467		Brown sand.
467	495		White sand with streaks of talc.
495	541		Brown sand with
541	568		Pink sand with talc.
568	585		Pink sandy lime - hard.
585	595		Hard gray sandy lime.
595	600		Sandy lime.
600	605		Pink shale.
605	610		Pink sand.
610	615		Pink sand.
615	618		Drilling out rock - bailed okay.
618	632		Pink sandy shale.
632	650		Brown sand.
650	690		Light brown sand.
690	747		Light brown sand with talc.
747	755		Red shale.
755	805		Red sandy shale.
805	820		Pink sand with talc.
820	855		White sand with talc.
855	875		Pink sand with talc.
875	900		Pink sand with talc.
900	950		Gray sandy talc.
950	1070		Blue gray sand with talc.
1070	1085		(Running 10" casing. Cemented at 1109 feet).
1085	1109		Blue gray sand with talc.
1109	1124		Red shale. Re-Cemented pipe. (Top of Chinlee)
1124	1131		Red shale.
1131	1135		Red sand.
1135	1151		Red sandy shale.
1151	1160		Red sandy lime.
1160	1162		Sand with water.
1162	1185		Sand.
1185	1215		Red sandy shale.
1215	1218		Sand with more water.
1218	1245		Sand.
1245	1275		Red sand.
1275	1295		Red sand with water.
1295	1348		Red sand.
1348	1400		Light brown sandy shale.
1400	1595		Red sandy shale.
1595	1622		Red sandy shale - hard.
1622	1628		Sandy lime.
1628	1634		Red shale. (Top of Moenkopi.)
1634	1640		Red sandy lime.
1640	1655		Red shale.
1655	1658		Red lime.
1658	1672		Red shale.
1672	1683		Correct measurement on hole.
1683	1738		Red shale. Hole caving badly. Caving from around 10 inch shoe.

## FORMATION RECORD—Continued

Page 2 of Log.

FROM	TO	TOTAL FEET	FORMATION
5349	5357		Brown limy sand.
5357	5395		Brown sandy lime.
5395	5406		Brown sandy lime - hard.
5406	5645		Brown sandy lime.
5645	5656		Brown sandy lime - hard.
5656	5680		Brown sandy lime.
5680	5689		Brown sandy lime - hard.
5689	5699		The sand in this formation is coarse and has
5699	5754		Brown sandy lime - coarse - hard.
5754	5775		Brown sandy lime - hard.
			Brown sandy lime - these samples show less
			sand than the samples have been showing.
5775	5793		Brown sandy lime - fine - hard.
5793	5810		Brown sandy lime - hard.
5810	5921		Brown sandy lime.
5921	5934		Brown sandy shaley lime.
5934	5953		Brown sandy lime.
5953	5980		Brown sandy shaley lime.
5980	5992		Brown sandy lime.
5992	6007		Brown sandy shaley lime.
6007	6061		Brown sandy lime.
6061	6188		Brown sandy shaley lime.
6188	6200		Brown sandy lime.
6200	6207		Brown sandy shaley lime.
6207	6222		Brown sandy shale with small particles of
			grayish green shale and a few pieces of
			gypsum.
6222	6236		Brown sandy shale and lime.
6236	6243		Brown sandy shale.
6243	6304		Brown sandy shaley lime.
6304	6310		Brown sandy lime.
6310	6331		Brown sandy shaley lime.
6331	6355		Brown sandy lime.
6355	6363		Brown sandy shaley lime.
6363	6409		Brown sandy lime.
6409	6420		Brown sandy shale.
6420	6449		Brown sandy lime.
6449	6502		Brown sandy lime and shale.
6502	6527		Brown sandy shale.
6527	6541		Brown sandy lime - hard.
6541	6570		Brown sandy lime.
6570	6589		Brown sandy shale and lime.
6589	6636		Brown sandy lime.
6636	6645		Brown sandy lime - hard.
6645	6664		Brown sandy lime and shale.
6664	6680		Brown sandy lime.
6680	6700		Brown sandy shale and lime.
6700	6715		Brown sandy lime.

SINCE AND VARIATIONS

CISCO UNIT AREA - Grand County

33-22S-22E S NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>, Utah Southern Oil Co. Hyde No. 1 (S.L. 051394)

Ref. No. 1. (SEPTEMBER, 1939)

X STATUS: DST - T.D. 6715', shaley limestone (G.T.Hansen 10-2-39)

REMARKS: Notice of intention to abandon approved October 3, 1939. Crew overhauling equipment preparatory to starting work. Well will be conditioned and left as a water well for possible utilization by a mining company or for stock watering purposes by the Division of Grazing. Operator has served notice by registered mail on all permittees that their permits will be relinquished to the Government upon completion of plugging and abandonment work, as provided in the unit plan.

CISCO UNIT AREA - Grand County

33-22S-22E S NW<sup>1</sup>/<sub>4</sub>, Utah Southern Oil Co. Hyde No. 1 (S.L. 051394)

Ref. No. 1. (OCTOBER, 1939)

X STATUS: Abd. T.D. 6715', shaley limestone (G.T.Hansen 11-6-39).

REMARKS: Plugging and abandonment work commenced October 3, 1939, was completed October 25, 1939. Hole was filled with mud to 1975 feet, bridged at that depth, and bridge capped with five sacks cement. The 8<sup>1</sup>/<sub>2</sub>-inch casing was found to be frozen and when shooting to free same, the shot was accidentally exploded at 600 feet. Hole was mudded to 450 feet, bridged, and bridge capped with 17 sacks cement. The 10-inch casing was ripped at 325 to 335 feet and 300 to 310 feet to permit fresh water to come into the hole. Water rose to 225 feet below surface and appears to have sufficient volume for any purpose for which it may be used. The 10-inch casing was capped at the surface, cellar filled in, and location cleaned up. The well will be used by the Grazing Division for stock watering purposes. Approval of subsequent report of abandonment withheld pending inspection of location.

CISCO UNIT AREA - Grand County

33-22S-22E S NW<sup>1</sup>/<sub>4</sub>, Utah Southern Oil Co. Hyde No. 1 (S.L. 051394)

Ref. No. 1. (NOVEMBER, 1939)

X STATUS: P&A - T.D. 6715', shaley limestone (Visited 11-14-39).

REMARKS: Subsequent report of abandonment approved November 27, 1939. Lowest formation tested probably Hermosa of Pennsylvanian age. A right to appropriate water in this well, secured by operator from the State of Utah, has been assigned to the Division of Grazing and the well will hereafter be used as a public water supply for stock watering purposes.

U.S. Land Office Salt Lake City

DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Serial Number 051394

Lease or Permit Permit

SUNDRY NOTICES AND REPORTS ON WELLS

NOV 6 1939

NOTICE OF INTENTION TO DRILL	SUBSEQUENT RECORD OF SHOOTING
NOTICE OF INTENTION TO CHANGE PLANS	RECORD OF PERFORATING CASING
NOTICE OF DATE FOR TEST OF WATER SHUT-OFF	NOTICE OF INTENTION TO PULL OR OTHERWISE ALTER CASING
REPORT ON RESULT OF TEST OF WATER SHUT-OFF	NOTICE OF INTENTION TO ABANDON WELL
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL	SUBSEQUENT REPORT OF ABANDONMENT
NOTICE OF INTENTION TO SHOOT	SUPPLEMENTARY WELL HISTORY

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

October 30, 1939, 19

Following is a ~~notice of intention to do work~~  
~~report of work done~~ on land under ~~permit~~  
~~XXXXXX~~ described as follows:

Utah

(State or Territory)

Grand County,

(County or Subdivision)

Cisco Unit Area,

(Field)

Well No. 1

NE 1/4 NE 1/4 Section 33,  
(1/4 Sec. and Sec. No.)

T. 22 South, R. 22 East,  
(Twp.) (Range)

S.L.C.  
(Meridian)

The well is located 1100 ft. ~~N~~  
~~S~~ of Northline and 640 ft. ~~E~~  
~~W~~ of Westline of sec. 33,

The elevation of the derrick floor above sea level is 4785 ft.

DETAILS OF PLAN OF WORK

(State names of and expected depths to objective sands, show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work.)

Work commenced October 3, 1939, and was completed October 25, 1939. Filled hole with mud up to 1975 feet and started bridge on top of mud at this depth and dumped 5 sacks of cement and filled the hole back to 1400 feet with mud. We used approximately 17,500 gallons of mud to fill the hole to this point which was good smooth mud, mixed with crank mixer, one gallon of water, making approximately 2 gallons of mud fluid when mixed. Shot 8 1/4 inch casing at 1400 feet, 1300 feet and 1120 feet, but pipe seemed to be frozen up this far and would not come loose. Filled hole with mud back to a little above 1100 feet and prepared to shoot 8 1/4 inch casing again between 1050 and 1075 feet. Shot went off prematurely and parted the 8 1/4 inch casing at 600 feet. Pulled the 8 1/4 inch casing and dumped more mud in the hole and then started bridge inside the 10 inch casing at the top of the 8 1/4 inch casing and filled back to 430 feet from the surface. Dumped 17 sacks of cement which filled the hole back to 395 feet when checked after setting. The hole bailed ~~and cement~~ set okay. When the shot went off at 600 feet, it apparently did not ~~set~~ (over)

Approved October 27, 1939  
(Date)

Company UTAH SOUTHERN OIL COMPANY

Title E. W. Henderson  
District Engineer  
GEOLOGICAL SURVEY

By \_\_\_\_\_  
Title President

Address 308 Federal Building  
Salt Lake City, Utah

Address 901 Utah Oil Bldg. Salt Lake City.

NOTE.—Reports on this form to be submitted in triplicate to the Supervisor for approval.